



# Commitment at work: how to explain the French paradox?

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## **MEMOIRE DE MASTER**

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### **Commitment at work: how to explain the French paradox?**

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## ABSTRACT

French workers are known to report exceptionally low well-being scores, especially at work and may sometimes be considered as an outlier among developed countries. Commitment at work, and more precisely organizational commitment, follows the same pattern, confirming the French paradox hypothesis. This paper uses 2005 cross section ISSP data to explain this specific position. It compares France results to a top-ranked country, the United States, and a median one, Canada. The results confirm that organizational commitment of workers relies more on subjective evaluations of job outcomes than objective measures. Even if France still shows the lowest explained variance in regressions, we observe, in this country only, a congruence effect between the worker's preferences and his subjective evaluation of job outcomes. This finding supports the hypothesis of Person-Organization fit to explain work attitudes.

## I. INTRODUCTION OF THE TOPIC

Job satisfaction, organizational and employment commitment are defined as employee attitudes which are evaluative tendencies towards one's job, organizational and employment respectively (Verquer & al, 2003). However while many papers have been written on worker satisfaction, especially related to remuneration in economics, organizational and employment commitment have received much less attention in economics than in psychology: after job satisfaction, organizational commitment is said to be the second most studied among the family of constructs related to happiness at work (Fisher, 2010). It is found to be positively correlated to overall job satisfaction, supervision and coworker satisfaction, job performance and organizational citizenship behaviours and attendance. It also impacts negatively turnover intention and turnover (Cooper-Hakim & Viswesvaran, 2005; Meyer & al, 2002; Rubin & Brody, 2005). Commitment may be interesting to study in economics, as the largest part of workers' effort and thus their productivity at work indeed remains to be explained (Clark, 2011).

Commitment is defined as a willingness to persist in the course of action and has been mainly studied in organizational behaviors with multiple conceptions, forms and bases: organizational commitment, job involvement, career commitment, work involvement, union commitment... (Cooper-Hakim & Viswesvaran, 2005; Swailes, 2002). When concept redundancy has been noted as a major problem in the literature (Morrow, 1993), Becker (1992) argued that a distinction must be done between forms of commitment (organization, job, union...) and motivational bases of commitment (affective, calculative...). Studied by many researchers, organizational commitment is defined as "the strength of an individual's identification with and involvement in a particular organization" (Porter & al, 1974, p.604). A high committed worker wants (1) to stay with his organization, (2) work for the good of the organization and (3) adhere to the prominent values of the organization (Mowday & al, 1979; Porter & al, 1974). A second construct of commitment at work is named employment commitment, which is opposed to the instrumental orientation to work. It refers to the degree to which a person is involved in paid job in general, regardless of financial need (Esser, 2009; Warr & al, 1979).

Our analysis will be narrowed to the French sample. Indeed France is reported to be an outlier in numbers of international comparisons. France often appears in the highest or the lowest scores about work attributes, and maintains this position in time. For example, Senik (2010) notes that French people report exceptionally low well-being scores, particularly in the work domain. Clark (2011) draws the same conclusion for organizational commitment among French workers, compared to OECD countries in 1997 and 2005. Bonsang & van Soest (2010) suggest that income satisfaction among French workers should be higher given their actual incomes. Davoine & Méda (2009) even talk about a paradox of the French job-worker relationship. For almost 70% of French workers, labour is very important (EVS, 2008, 1999). However a significant part of French workers would like to decrease their working time (37% - European maximum - ISSP 2005; 27% - EWCS 2010).

Beyond the fact that work commitment has not been much studied in economics, the relation between a worker and his organization may be insightful in this specific French context. So we have used the cross-section survey, International Social Survey Programme (ISSP) – Work Orientation III, made in 2005 on 31 countries, to conduct a country-comparison study on the determinants of employment and organizational commitment. After considering socio-demographic and objective job-related measures, we will focus our attention on subjective assessments and more specifically on the congruence between the worker's job values and his assessment of his job outcomes. Identifying determinants of commitment at work may help understanding the specific drivers for French workers and defining actions to favor its increase and prevent from some deviant or quitting behaviors.

This thesis is organized as follows. The following part presents the theoretical background from which we have deduced our hypotheses. The second section explains our methods, especially our variables at stake. Results are then presented considering first the identification of countries under study, secondly the distribution of commitment at work between these countries using objective job-related and socio-demographic variables, then the introduction of subjective measures of job outcomes to explain our dependent variables. The last detailed results are dedicated to the introduction of congruence variables into the regression analysis. The last two sections discuss our results and conclude.



## II. THEORETICAL BACKGROUND AND HYPOTHESES

Commitment at work is defined as the willingness to persist in the course of action. Multiple forms have been proposed and scholars recognize that: (1) commitment can be directed to various targets; (2) and can take different forms (Meyer & al, 2004). Indeed work life of an individual can be considered as a unit in its entirety (Stagner, 1954). Workers can be part of an organization, a work group, a union...If the compatibility of goals between these different targets depends on the efficiency of the organization, the achievement of all these goals depends not only on the overlap across the targets of commitment but also between the different forms of commitment (Cooper-Hakim & al, 2005). Morrow (1993) thinks that commitment is a unified concept, which forms constitute the different facets. She defines commitment at work as composed of job involvement, affective organizational commitment, continuance organizational commitment, career commitment and work ethic endorsement. Beyond the fact that integrating different forms of commitment may improve the validity of measures of work commitment, this conception of multiple forms has been confirmed empirically, showing a higher predictive power of organizational behaviors, compared to single commitment forms (Cohen, 2003).

Organizational commitment is defined as a three-factor construct by Meyer & Allen (1984): (1) affective organizational commitment refers to the emotional attachment to, identification with and involvement in his organization (individuals stay in the organization “because they want to”); (2) continuance organizational commitment refers to the continuation of a course of action, based on the perceived costs with leaving it (“because they need to”); (3) normative organizational commitment refers to the sense of duty, obligation and loyalty towards the employing organization (“because they should do so”) (Allen & Mayer, 1984/1990). However normative and affective commitments are not sometimes found distinct empirically, suggesting a common form of psychological attachment of affective commitment (Cohen, 2007; Ko & al, 1997).

Employment commitment is defined as the degree to which an individual desire to be employed and determines how he is dedicated to the labor market (Jackson & al, 1983). People high in

employment commitment “showed greater change in distress scores as a result of change in employment status” (Jackson & al, 1983, p. 532).

Intercorrelations between the different commitment forms suggest the existence of a common latent psychological construct of work commitment and all are positively related to job satisfaction, job performance and prevent turnover intention and actual turnover, especially affective organizational commitment (Copper Hakim & al, 2005). Considering the global concept of work commitment, we propose to both integrate in our study the construct of organizational commitment and employment commitment and to test the existence of a higher-order latent factor.

Copper Hakim & Viswesran (2005) in their meta-analysis on work commitment notice the restricted generalizability of their study as very few researches on this topic include samples out of North America. Indeed Redding, Norman & Schandler (1994) show that people from different cultures may experience commitment at work differently. Moreover the interest of cultural impact of commitment has risen recently with the increasing globalization of economy and culture diversity within the workplace (Meyer & al, 2012). At last, with changes of jobs at least 5 times in a career (Kransdorff, 1997), individuals tend to be less tied to an individual organization, which directly supports the necessity to better understand its determinants in a global context.

All these statements point out the need to further investigate cross-country comparison of work commitment. We propose to focus our attention on France, as identified as an outlier by Clark (2011) in his study on organizational commitment between OECD countries. Moreover Méda & Vendramin (2013) have found a low score of instrumental dimensions of labor, showing that only 30% of French people say that job is only a mean to earn one's life. France has the lowest score after Sweden and Denmark.

The two main questions addressed in this thesis: does France show the same pattern for employment commitment and organizational commitment? What are the individual determinants of commitment at work that may account for the French paradoxal position?

According to need-press theories, behaviors result from the continuous interactions between the individual and his environment and more specifically, from the individual's needs or goals and his perception of the environment as capable of satisfying these needs or meeting these goals. Based on this assumption, Kristof (1996) has defined Person-Organization (P-O) fit as: "the compatibility between people and organizations that occurs when: (1) at least one entity provides what the other needs, or (2) they share similar fundamental characteristics, or (3) both" (p 4-5). Focusing on the job, it becomes Person-Job fit and is defined as the relationship between the individual's characteristics and those of the job or tasks that are performed at work. They are based on the general principle of congruence: complementary congruence, when the organization and the person contribute to the fulfillment of needs of one another and supplementary congruence, when they share the same specificities. It has been declined in many different forms of congruence, in particular value congruence, goal congruence, personality-climate fit, with a higher number of studies on value congruence due to its high predictive power of job attitudes compared to the other forms of congruence. At the job level, Edwards (1991) identifies the demands-abilities fit or congruence in which employees' knowledge, skills, abilities fit with the job requirements, needs-supplies or supplies-values fit or congruence, when workers' needs, desires or preferences are met by the jobs that they perform. The latter is used especially to assess the fit on topics like pay, promotion, which will be part of our focus in this research.

Meta analyses and studies on P-O fit show congruent results about the prediction of work attitudes, in particular job satisfaction and organizational commitment, with scores around 0.20 (Greguras & al, 2009; Verquer & al, 2003). So this approach is relevant to run a country comparison on work commitment. Indeed one may expect that lower scores on organizational and employment commitment for France can be explained by higher level of needs-supplies incongruence, compared to the other countries. Argyris (1957) claims that some incongruence between the individual and the organization is anyway inherent and even a certain amount of incongruence is required for the individual to be motivated for his work. However too much incongruence can be detrimental for both the individual and the organization.

How to measure P-O fit? Some issues occur and are still in debate among scholars about the best way to measure congruence, as different predictive powers of P-O fit have been found, depending on the questions asked to the workers. Verquer & al (2003) have differentiated three categories: (1) objective fit when fit includes someone else's perception of the environment (for instance, the preferences of an individual and a supervisor's perceptions of the organization), (2) perceived fit when fit relies on scores assessed by the same individuals (for instance, the preferences of an individual and the individual's perception of the organization), (3) subjective fit when the individual is asked directly to assess congruence. Considering our dataset, we have only answers from the same individuals and no question on the congruence with the organization. So we will use perceived fit measures to create our congruence variables, which seems to be the best situation as perceived-fit measures show better results to predict work attitudes (Verquer & al, 2003). Another point of discussion among researchers relates to the statistical computations of the fit variables, with inconsistent results between P-O fit and the criteria used. Two main practices are observed to calculate the person's congruence or fit score: the difference between the two P-O measures or the intra-individual correlations. The former highlights the absolute score as determinants of fit and assesses the similarity between set of scores, enabling comparison of means. The latter considers the relative order of the measures in terms of strengths or importance for the person and provides information on the shape of the profiles being compared (Verquer & al, 2003). However correlations have been viewed as "flawed measure of fit" (Westerman & Cyr, 2004). Conceptual ambiguity, as well as discarded information have been observed in studies. Furthermore correlational-measured fit suffers from a lack of theoretical bases (Edwards, 1993). So we propose to rely our fit variables on difference between scores about individuals' preferences and the perceptive questions about job outcomes.

The congruence focus enables us to complete a previous study performed by Clark (2011) on the determinants of organizational commitment across OECD countries. He investigates three types of variables: socio-demographic variables, job-related variables and country-level variables. He finds out that the enormous cross-country differences are difficult to explain using individual characteristics: male, with respect to female, is more willing to work harder for their firm. Being married, with respect

to not being married, impacts positively organizational commitment, while years of education are positively and significantly correlated with it. Moreover workers feel more reciprocity towards their firm when they are paid more, in spite of multicollinearity with being a male and education years. Hours of work per week are also found to significantly and positively predict organizational commitment, but with concern of reverse causality. Clark (2011) also notes that the more often the individual attends religious services, the greater is their feeling of reciprocity with respect to the firm. However, comparing models with country-dummies, he concludes that the demographic controls actually explain “very little of the cross-country distribution of reciprocity”. Then Clark (2011) focuses his attention on job characteristics, such as public or private sector: “while public-sector workers are very significantly less likely to say that they are willing to work harder than they have to in order to help their firm or organization to succeed, they are significantly more likely to say that that are proud to work for their firm and that they would turn down another job offering more money.” He also points out that supervising others has a positive and significant estimated coefficient in organizational commitment regressions, in spite of the possible reverse causality. At last, being a union member, with respect to not being unionized, has a negative and significant impact on additional working effort. However he concludes that these variables related to job characteristics explain “in no way” the country distribution of worker reciprocity. Investigating macro variables, Clark (2011) finally shows that unemployment rate and inflation explain around 25% of the variance of the cross-country distribution of organizational commitment : “higher inflation rates reduce the percentage of workers who would turn down a job that offered more pay to stay with their firm [...] (while) greater unemployment was shown to reduce workers’ discretionary effort”.

Considering individual level, Clark’s results are congruent with the literature as subjective measures are more proximal predictors of employee attitudes and behaviors than objective measures (Cable & DeRue, 2002). Clark (1998) indeed observed this effect in his cross-country study on job satisfaction. He concludes that limiting the analysis to objective measures of job outcomes such as wages or hours of work is misleading to predict job satisfaction. More specifically, subjective measures of pay and preferred working hours explain much more job satisfaction, even after controlling for actual wages and hours per week.

Based on the determinants of organizational commitment and by extension on employment commitment, identified by Clark (2011), we propose to extend his study to the specific context of France and to use socio-demographic and job-related variables to conduct the cross-country comparison on our both dependent variables. We expect a low explained variance by job-related explanatory variables and socio-demographic variables for all countries. By introducing subjective measures of job outcomes, controlling for our previous variables, we make the hypothesis that OLS regression analysis will lead to a higher adjusted R-squared for all our countries, with France at the lowest position. At last, we will test our hypothesis on congruence effect.

### III. METHOD

#### a. Sample

The dataset is a cross-section named Work Orientation. It is part of the International Social Survey Programme, which is a continuing annual programme of cross-national collaboration by a group of national research institutes ([www.issp.org](http://www.issp.org)). The ISSP Work orientations module relies on 3 surveys from 1989, 1997 and 2005, which are partial replication of one another. It deals with employment arrangements, job characteristics, subjective experience of job, outcome of work, work-life balance, work centrality, and solidarity and conflict in work relations. The ISSP samples are mostly stratified and designed to be representative of adults, on the basis of weight variables on sex, age (4 groups) and occupations (6 groups).

We have based our study on the last version of this module: "ISSP – 2005: Work orientation III". Based on a 75-item self-report paper-and-pencil questionnaire, the sample is composed of 43 440 observations from 31 countries with 303 variables. Our inclusion criteria was being a full or part-time worker who isn't self-employed or helper of a family member and who lives in France or in countries ranking at the top and at the median of the distribution of employment and organizational commitment. While our first intention was to use a time-serie design, this option was rejected as France was unavailable in the 1997 sample and the variable, differentiating self-employed workers and family helpers from employees, was not proposed in one of the selected country in 2005.

Our final sample is made of 3 156 observations from France, the United-States, the top-rank country and Canada and Norway as median countries, as detailed in Table 1. The country-selection analysis is presented in the first part of the result section.

Country	Number	Percent
US-United	851	26,96%
NO-Norway	768	24,33%
CA-Canada	517	16,38%
FR-France	1020	32,32%
<b>Total</b>	<b>3156</b>	<b>100%</b>

*Table 1 - Number of observations by country in the restricted sample*

With 53% of females, a majority of workers have completed the university (32%) and 58% are married or live as married. 37% of households are made of at least 2 adults with no children and 32% are 2 adults with at least one child. 63% of employees work in a private company and 31% for the government. 54% of the sample belongs to the high occupational class and 84% are employed full time. The majority are Protestants (39%). Some country-specific descriptive statistics are provided in Table 2.

Variables	ISSP WO 2005 restricted sample
<b>Country</b>	The smallest sample is Canada (517) and the biggest France (1020)
<b>Gender</b>	53 % of females, mostly represented in France (35% - 590). Men are mainly found in the US (29% - 433)
<b>Highest education degree</b>	A majority have completed the university (32%) and 24% have their higher secondary degree. The French people are the most having completed the university (31% compared to the other countries in the same category), but they are also the most numerous having only the lowest formal qualifications (51%)
<b>Marital status</b>	58% are married or live as married, while 26% are single. Compared to other countries, Americans are the most numerous having divorced (16% of Americans) and widowed (2%). French people are single for 30%, the highest proportion in this category compared to other countries.
<b>Household composition</b>	37% of household are made of at least 2 adults with no children. 32% are 2 adults with at least one child. Compared to other countries, Americans are the most numerous living alone (24%) but France have the most numerous household with one adult with at least one child (9%).
<b>Activity sector</b>	63% of employees work in a private company and 31% for the government. 17% of people living in Canada work for a public owned company, which is the most represented country in this category (49%). The majority of French workers for the government (32%)
<b>Current occupational class</b>	54% of the sample belongs to the high occupational class, in particular people living in France (34%). 12% are in the lower occupational class, mainly represented by the US (44%).
<b>Working time</b>	84% are employed full time, especially in France (30%). Only 1 % are employed less than part-time.
<b>Number of working hours per week</b>	41% work between 36 and 40 hours a week and 21% between 41 and 50 hours a week. Americans are found to work the most (57% between 51-60 hours and 57% between 61-95 hours, compared to the same categories in other countries).
<b>Supervision responsibilities</b>	63% of workers do not supervise others. Canadian people are found to supervise the most compared to other countries (48%).
<b>Union membership</b>	70% are not currently member in a union. 63% of workers in Norway are found to be unionized.
<b>Religion group</b>	The majority are Protestants (39%) and live mainly in Norway (56%) and in the US (36%). While Roman Catholicism is the most represented religion in France (52%) and in Canada (49%), Atheists are the most numerous in France (43%), compared to the other countries.

Table 2 - Summary of descriptive statistics in the final sample



## b. Variables

*Dependant variable:* The ISSP Work Orientation III provides several questions that inform us about workers' organizational and employment commitment. Employment commitment is assessed using the two following statements on which respondents are asked to what extent they agree or disagree with:

- A job is just a way of earning money – no more (=ECommitMoney)
- I would enjoy having a paid job even if I did not need the money (=ECommitJobR)

For organizational commitment, workers have to assess their agreement with the three following items with respect to their main job:

- “I am willing to work harder than I have to in order to help the firm or organization I work for to succeed” (=OCommitHelpR)
- “I am proud to be working for my firm or organization” (=OCommitProudR)
- I would turn down another job that offered quite a bit more pay in order to stay with this organization (=OCommitStayR)

We have used three additional questions that can be related to organizational commitment:

- How difficult or easy do you think it would be for you to find job at least as good as your current one? (=OCommitFindJob)
- How difficult or easy do you think it would be for your firm or organization to replace you if you left? (=OCommitReplace)
- All in all, how likely is that you will try to find a job with another firm or organization within the next 12 months? (=OCommitSearchR)

If the first three variables are more related to affective organizational commitment, the last three ones may be more related to continuance organizational commitment. All these statements or questions are measured using 5-point scale with neutral position for 3, except for the last one (OCommitSearchR), which is based on a 4-point scale from “Very likely” to “Very unlikely”. The “R” at the end of some variable names means that their coding has been reversed to reflect greater amount of organizational commitment when higher value.

In the original sample of 31 countries, which was used for our country analysis, the six organizational commitment measures are correlated between themselves but not perfectly. The Pearson correlation between OCommitHelpR and OCommitFindJob, as well as OCommitFindJob and OCommitReplace are not significant at a 0.05 level, which questions the hypothesized distinction between affective and continuance organizational commitment. Moreover all correlations remain lower than 0.40, except for OCommitProudR and OCommitHelpR (0.55) and OCommitProudR and OCommitStayR (0.44). Results are confirmed using Spearman correlations, which consider data ordinally, except for a low but significant link between OCommitHelpR and OCommitFindJob (0.02). With a low Cronbach alpha of 0.57, these findings suggest a higher-order single-factor structure. The Eigen-value analysis confirms this hypothesis and using the condition of a loading factor greater than .40, we have kept the three related variables: OCommitHelpR, OCommitProudR, OCommitJobR. Our main variable for organizational commitment has been generated on the basis of a second factorial analysis based only on our three previous variables (cf. Appendix 1). We have also used the mean of the three scores of these variables, controlling for missing values.

The Pearson and Spearman correlations for job commitment are significant at a 0.05 level and both equal to 0.23. We have taken the mean of the scores of the two related variables, ECommitMoney and ECommitJobR, controlling for missing values.

When testing for a latent factor, introducing all variables related to organizational and employment commitment into a factorial analysis, we have not been able to identify a higher-order structure. So our three dependent variables are a factorial index (OCommit) and a mean (OCommitM) for organizational commitment and a mean for job commitment (ECommitM).

*Independent variables:* the explanatory variables of interest are:

- Preferences at work, in particular high income, flexible work hours, good opportunities for advancement, job security, interesting job, allows to work independently, helping other people in one's job, job useful to society, activity sector, working time (full vs. partial time / increase vs. decrease of working time);

- Objective measures of the current situation at work, especially activity sector, working time (full vs. partial time), pay, number of working hours per week, current occupation, supervision responsibilities, union membership, training during the past 12 months;
- Subjective measures of the current situation at work, particularly job satisfaction, high income, flexible work hours, good opportunities for advancement, job security, interesting job, allows working independently, helping other people in one's job, job useful to society, liberty to define one's work organization, easiness to take some hours off for personal matters, quality of the relationship with management and colleagues, use and transferability of current skills, labor conditions (danger, stress, physical demand and exhaust feeling).

#### *Control variables:*

- Country and working status (full or part-time employee, retired, student, helper of a family member, unemployed...) have been used to select our final sample.
- We add micro variable to control the regression, on the basis of the literature review: gender, age, marital status, education, household composition, religion group and attendance to religious service.

Appendix 2 details the variables used in our study, with some descriptive statistics.

### **c. Methodology**

We have selected the countries under study using country-specific descriptive statistics on the dependent variables. Student tests have been used to control for significant differences between observed values.

For regression analysis, as our dependent variable is continuous, we have performed weighted OLS regression. We have used the stepwise and backward regression methods. Fisher test has been used to assess the jointly non significance of the removed variables. Post estimation analysis has been performed to evaluate the models, especially normality of residuals, multicollinearity, misspecification and omitted variables.

## IV. RESULTS

### a. Identification of the countries under study

Our focus is a comparison of French workers to countries with high and median scores for employment and organizational commitment. More precisely, the workers must not be self-employed and be employed full- or part-time.

Using our three dependent variables generated on our 31-country sample, we have obtained unexpected results for employment commitment (ECommitM). While France shows a paradoxal position for organizational commitment, it has not been confirmed for employment commitment. It is not found in the tails of the distribution, with a French mean for ECommitM between the second and the third quartiles. Detailing the related variables, ECommitJob mean for France is not significantly different from the mean of ECommitJob, while ECommitMoney is significantly different from the mean of ECommitMoney but between the second and the third quartiles. So we have rejected the hypothesis that employment commitment among French workers shows an extreme position in the distribution. As our focus is on the French paradox, we have stopped studying employment commitment from this point of the study.

Regarding organizational commitment, the paradoxal position of France is confirmed for our both indexes (OCommitM, OCommit). Detailing the analysis by their variables, we have found contrasted results, as France is found at the bottom of the distribution for OCommitHelpR and OCommitStayR while it is closer to the mean for OCommitProudR. The United States are at the top of the distribution for OCommitHelpR and OCommitProud, while their scores are significantly not different from the mean for OCommitStayR. The US is also found at the top of the distribution of our indexes (4th position for OCommitM and 1st for OCommit). So as our analysis will be conducted on our aggregated dependent variables, we have chosen to keep the United States as the reference top-rank country. Regarding the median country, we have kept Norway (for OCommitM) and the Canada (for OCommit) as we cannot reject the hypothesis that their means are significantly different from the median of the distribution of OCommitM and OCommit respectively.

ECommitM	Mean	SD	N	OCommitM	Mean	SD	N	Ocommit	Mean	SD	N
NO-Norway	3,85	0,83	1229	DO-Domin	3,72	0,70	903	US-United	0,33	0,73	1007
DK-Denmar	3,81	1,08	1463	CH-Switze	3,69	0,76	662	MX-Mexico	0,32	0,77	660
CH-Switze	3,68	0,79	1060	MX-Mexico	3,68	0,84	660	DO-Domin	0,31	0,62	903
SE-Sweden	3,60	0,89	1234	US-United	3,66	0,82	1007	CH-Switze	0,29	0,68	662
DE-E-Germ	3,54	0,90	548	PH-Philip	3,63	0,71	592	IE-Irelan	0,26	0,73	539
IL-Israel	3,54	1,02	1133	IE-Irelan	3,61	0,83	539	PH-Philip	0,23	0,67	592
NZ-New Ze	3,53	0,83	1205	JP-Japan	3,61	0,93	516	PT-Portug	0,18	0,76	1049
CA-Canada	3,45	0,85	856	PT-Portug	3,57	0,84	1049	ZA-South	0,17	0,84	843
US-United	3,45	0,89	1506	ZA-South	3,53	0,91	843	JP-Japan	0,13	0,88	516
DE-W-Germ	3,42	0,98	1020	IL-Israel	3,48	1,01	593	IL-Israel	0,13	0,94	593
IE-Irelan	3,41	1,04	972	TW-Taiwan	3,46	0,69	1227	CA-Canada	0,10	0,72	545
AU-Austra	3,39	0,88	1770	CA-Canada	3,44	0,78	545	NZ-New Ze	0,08	0,70	831
FR-France	3,38	1,09	1356	KR-South	3,44	0,86	813	DE-E-Germ	0,07	0,68	279
TW-Taiwan	3,37	0,66	2133	CY-Cyprus	3,43	0,76	506	TW-Taiwan	0,07	0,63	1227
JP-Japan	3,37	1,12	854	NZ-New Ze	3,43	0,76	831	DK-Denmar	0,06	0,89	1125
FLA-Fland	3,35	0,89	1196	DE-W-Germ	3,42	0,79	536	DE-W-Germ	0,03	0,73	536
GB-Great	3,28	0,92	764	DE-E-Germ	3,41	0,75	279	CY-Cyprus	0,03	0,69	506
KR-South	3,27	0,83	1551	DK-Denmar	3,39	0,97	1125	GB-Great	0,03	0,68	453
MX-Mexico	3,23	0,91	1363	GB-Great	3,37	0,75	453	KR-South	0,02	0,78	813
PT-Portug	3,22	1,00	1798	AU-Austra	3,36	0,78	1095	AU-Austra	0,01	0,71	1095
HU-Hungar	3,21	1,01	986	NO-Norway	3,35	0,75	941	NO-Norway	0,01	0,68	941
DO-Domin	3,14	0,88	1912	FLA-Fland	3,33	0,75	746	SI-Sloven	-0,03	0,77	477
LV-Latvia	3,08	0,97	1018	SI-Sloven	3,32	0,84	477	FLA-Fland	-0,05	0,68	746
FI-Finlan	3,05	1,02	1119	BG-Bulgar	3,25	0,92	469	BG-Bulgar	-0,15	0,86	469
SI-Sloven	3,01	0,94	947	CZ-Czech	3,18	0,80	668	CZ-Czech	-0,21	0,75	668
CZ-Czech	2,92	0,86	1204	FI-Finlan	3,10	0,86	676	HU-Hungar	-0,24	0,83	457
CY-Cyprus	2,83	0,81	926	HU-Hungar	3,08	0,88	457	SE-Sweden	-0,27	0,71	771
RU-Russia	2,77	1,09	1523	SE-Sweden	3,04	0,76	771	FI-Finlan	-0,29	0,80	676
ZA-South	2,74	0,94	2777	ES-Spain	3,01	0,88	537	ES-Spain	-0,33	0,82	537
ES-Spain	2,73	0,92	1163	RU-Russia	2,89	0,97	839	RU-Russia	-0,49	0,93	839
PH-Philip	2,72	0,72	1181	LV-Latvia	2,87	0,91	576	FR-France	-0,50	0,80	960
BG-Bulgar	2,48	0,99	1040	FR-France	2,78	0,86	960	LV-Latvia	-0,52	0,86	576
<b>Total</b>	<b>3,23</b>	<b>0,98</b>	<b>40807</b>	<b>Total</b>	<b>3,37</b>	<b>0,86</b>	<b>22891</b>	<b>Total</b>	<b>0,00</b>	<b>0,80</b>	<b>22891</b>

Table 3 – Country-specific descriptive statistics on the three aggregated dependent variables

After keeping selected countries, our inclusion criterion is being a full or part-time worker who is not self-employed, which excludes all categories from “Unemployed” to “Other, not in labour force”, as presented below:

Working time	N	Percent	Country	Working time for "Helping family member"
Employed-full time	2950	55,66%	NO-Norway	4
Employed-part time	540	10,19%	CA-Canada	5
Employed less than part-time	45	0,85%	FR-France	3
Helping family member	12	0,23%	<b>Total</b>	<b>12</b>
Unemployed	176	3,32%		
Student, at school, vocational training	218	4,11%		
Retired	831	15,68%		
Housewife, -man, home duties	283	5,34%		
Permanently disabled	102	1,92%		
Other, not in labour force	143	2,70%		
<b>Total</b>	<b>5300</b>	<b>100%</b>		

Tables 4 & 5 – Distribution of working time variable between its categories and countries

The question remains for the category “Helping family member” who may belongs to the labor forces. However they are only 4 in France, which is the lowest number of observations in the set of countries and there is no observation in the US. As we have much more possible independent variables, any

analysis cannot be conducted on a so small sample. We have kept strictly the following categories: employed full time (1), employed part time (2), employed less than part time (3), not being self-employed (4). An additional variable was used to drop self-employed workers. Our final sample is made of 3 156 observations.

The following tables present the distribution of our dependent variables between countries. They shows that the scores on the dimensions “Help” and “Proud” of organizational commitment are consistent between the US, Norway and Canada with more than 60% of agreement answers. The last question shows much less agreement with less than 30% of people being ready to refuse a job with higher pay. It is reflected in the mean of these variables with the highest mean for “Proud” (3.78) and the lowest mean for “Stay” (2.49). However in all the three dimensions, France shows much lower scores, with the highest difference for the willingness to exhort further effort to help one’s firm with only 22% of agreement, against 80% for the US. Using the factorial index OCommit, we notice that France is at the bottom of the 4 countries with a mean at -0.43 and less than one third of French workers above the mean, opposed to 0.33 as mean and almost three fourth of Americans above the mean. It is confirmed by Clark (2011) who has noticed that France was a “notable outlier” among OECD countries as it ranks among the three last positions on these three variables. Canada which is our reference median country for OCommit is higher than 50% with 64% above the mean and a mean of 0.16 for OCommit. These results are confirmed with the index OCommitM too.

Country	Observations		Agree: Work harder		Agree: Proud		Agree: Turn down another job		Ocommit>Mean	
US-United States	834	100%	669	80%	683	82%	234	28%	608	73%
NO-Norway	692	100%	454	66%	508	73%	154	22%	385	56%
CA-Canada	474	100%	314	66%	365	77%	119	25%	301	64%
FR-France	903	100%	199	22%	537	59%	139	15%	275	30%
Total	2903	100%	1636	56%	2093	72%	646	22%	1569	54%

  

DV	N	mean	sd	min	p25	p50	p75	max	skewness	kurtosis
OCommitHelpR	3035	3,40	1,16	1,00	3,00	4,00	4,00	5,00	-0,53	2,49
OCommitProudR	3068	3,78	0,93	1,00	3,00	4,00	4,00	5,00	-0,82	3,81
OcommitStayR	2957	2,49	1,18	1,00	2,00	2,00	3,00	5,00	0,39	2,21
OCommit	2903	0,00	0,79	-2,20	-0,54	0,12	0,58	1,54	-0,37	3,06
OCommitM	2903	3,22	0,85	1,00	2,67	3,33	3,67	5,00	-0,23	2,83

  

Ocommit	N	mean	sd	min	p25	p50	p75	max	skewness	kurtosis
US-United States	834	0,33	0,74	-2,20	-0,10	0,37	0,84	1,54	-0,59	3,43
NO-Norway	692	0,06	0,64	-2,20	-0,33	0,13	0,37	1,54	-0,29	3,21
CA-Canada	474	0,16	0,71	-2,20	-0,31	0,14	0,61	1,54	-0,32	3,24
FR-France	903	-0,43	0,78	-2,20	-0,87	-0,38	0,12	1,54	-0,20	2,87

Tables 6 to 8 – Descriptive statistics of the dependent variables

## b. Analysis of the distribution of organizational commitment

Following our analysis on raw data, we have performed regression analyses on organizational commitment, using both aggregated dependent variables and integrating dummy variables for countries. The dummies aim at capturing systematic differences between countries on organizational commitment. In all these OLS regressions, a set of control variables have been introduced, first related to socio-demographic characteristics with gender, age, marital status, household composition, education, attendance to religious services and secondly linked to current job specificities with respondent's income, number of hours worked per week, supervision responsibilities, activity sector, occupational classes and current union membership on the other hand. In comparison with the analysis performed by Clark (2011), household composition and occupational classes have been added. The omitted variables for categorical variables are France for the countries, 45-65 year-old workers for age, single household for household composition and high occupational class for occupational classes. The results are presented in Appendix 3.

In all regressions, the ranking between countries is confirmed with the US at the highest position followed by Canada and Norway. All the three countries have positive and significant coefficients with respect to France, confirming the lowest ranking in organizational commitment for French workers. To compare the relative contribution of country dummy variables, we have reported two

adjusted R-squared. The first one assesses the proportion of explained variance of organizational commitment in a regression with country dummies and control variables, while the second one estimates the explained variance in a regression including only country dummies. The difference between the two percentages estimates how much the country differences in organizational commitment are explained by the control variables introduced into the OLS regressions. Results are comparable between OCommit and OCommitM. When socio-demographic variables are introduced, adjusted R-squares are similar in size, implying that socio-demographic variables explain very little the cross-country distribution of organizational commitment. However an important difference is found when job-related controls are included into the regression, compared to the regressions including only country dummies or socio-demographic controls and country dummies. It seems that objective characteristics of the work situation may explain a significant variance of organizational commitment, with 20.60% of explained variance for regression with job-related control variables vs. 17.70% for regression with socio-demographic control variables in addition to country dummies. Same pattern is found for OCommitM regressions, with higher adjusted R-squared in general.

Adjusted R-squared of regressions with country dummies	Ocommit		OcommitM	
	Regression with control variables	Regression with only contry dummies	Regression with control variables	Regression with only contry dummies
Socio-demographic controls only	17,70%	15,90%	18,90%	17,34%
Job related controls only	20,60%	15,90%	22,20%	17,34%
Socio-demo + job related controls	22,10%	15,90%	23,40%	17,34%

*Table 9 – Comparison of adjusted R-squared of country-dummy regressions*

Focusing on estimated coefficient for socio-demographic control variables in the regression integrated both types of controls, women are seen to be more committed to their organization than men. This pattern, both observed in France and in the US, contradicts Clark's findings but has been found in other studies, especially outside North America (Esser, 2009; Meyer & al, 2002; Turunen, 2011). Being between 30 and 44 years old has a significant and positive impact on OCommit, with respect to 45-65 year-old workers. Even if 18-29 aged employees shows a non significant coefficient, organizational commitment appears to decrease with age. Here again, this effect is opposite to the effect highlighted by Clark (2001) but also by Meyer & al (2002) who have found a monotonic positive effect. Focusing on country-specific regression, this result is only significantly replicated in France. Consistent with the literature, married and regular attendees to religious services report higher scores in both OCommitM and OCommit regressions. However between countries, unexpectedly, only



France shows more commitment with one's firm when practicing religion at least several times a year. Regarding the number of completed years of schooling, the coefficient is found positive in the socio-demographic regressions, while it becomes insignificant in the aggregated ones. The positive effect of education may be captured by other correlated job-related variables, especially occupational classes, which show the highest correlation coefficient of -0.44 with education. Indeed this variable partly reflects the skill requirements for an employee's current job. Education is also correlated to sector at 0.20 and to supervision responsibilities, income and working hours but at a level lower than 0.10. This specific behavior is observed both in France and in the US, while it becomes non significant in all Canadian regressions. Household composition is not correlated to organizational commitment, with respect to single household, except for the 2 adults with at least one child which is negatively related to OCommitM at a low significance level (0.1) in the aggregated regression only. However studying differences between countries, a negative impact of mono-parental families, with respect to single households is noted among French workers, which remains significant after controlling for job-related specificities. For Canadians, the negative effect is found among other household compositions than the proposed categories but only in the socio-demographic regression.

Controlling for job-related characteristics in country-dummy regression, the estimated coefficients for wages are significantly positive, which is also found in the previous researches: workers with higher salary are more committed to their organization. However one may question the sense of the causality, as having a higher salary implies higher level of reciprocity towards one's firm. The similar remark can be made for the positive coefficient of supervision responsibilities, significant at a higher level than log of respondent's income. Yet at the country level, positive impact of respondent's income is reported only among Canadian employees in the job-related regression. Indeed this effect is captured by socio-demographic variables in the aggregated regression, especially by gender and educational years with correlations of 0.38 and 0.21 respectively. Canadians also shows a different pattern from France and the US for supervision responsibilities, with a non significant coefficient. A last specificity of Canadians is the negative impact of working hours, while it is not significant in all other regressions. Contrary to the literature, working too many hours for Canadian workers decreases commitment to their firms. However this result must be nuanced as job

quality is more defined by desired hours than actual hours, considering that involuntary long hours may impact deeply the worker's commitment. One may interpret this negative impact as a higher proportion of involuntarily long working weeks among Canadians. Unexpectedly, working for the government or a public-owned firm, with respect to private sector or being a union member do not impact positively and significantly organizational commitment. However French people appear different from other workers, as they are more committed when working in public service, but less when union member. This last result can be explained by the conflicting relationship shared by unions and firms in France, in opposition to Germany for example, but also by a reverse causality following the union members' possible disappointment of unsuccessful or difficult negotiations. At last, an interesting finding is the negative effect of belonging to the middle or the low occupational classes, with respect to the highest one. Middle occupational class gathers clerks, craft and trade-related workers, service workers, while low occupational class consists of farmers, plant and machine operators, assemblers and elementary occupations. High class regroups mainly legislators, senior officials, management and intellectual and scientific professionals. Even if it probably captures the effect of education, the variable shows a monotonic and decreasing relation with organizational commitment. At the country level, while Canadian low class members are less willing to commit, belonging to the middle class lowers the reciprocity of French workers towards their organization. It is also the case for the US, but the effect is captured when introduced in aggregated regression, in particular by number of schooling years with a high negative correlation coefficient of -0.51.

Comparing the relative contribution of each type of controls in regressions between countries, using adjusted R-squared, we observe that socio-demographic variables explains less amount of variance of organizational commitment than objective job-related controls, especially in the US. In all regressions, unexpectedly, France relies between Canada and the US with a maximum of explained variance of 9.34%.

<b>Adjusted R-squared Ocommit regressions</b>	<b>France</b>	<b>The United States</b>	<b>Canada</b>
Socio-demographic controls only	2,60%	1,29%	8,56%
Job related controls only	5,83%	4,86%	9,42%
Socio-demo + job related controls	9,34%	6,20%	12,90%

*Table 10 – Comparison of adjusted R-squared of country-specific regressions*

If socio-demographic and job-related characteristics give us some explanations of the worker reciprocity towards his organization, they did not help us understand why French employees are so less committed, compared to Americans and Canadians. In this next section, we move towards a more subjective approach of job attributes.

### **c. Introduction of subjective measures of job outcomes**

Some job attributes are not measurable in an objective way like respondent's income or number of working hours. They include the quality of the relationship with management and colleagues, job security, opportunities for advancement, job interest... In order to know their relative contribution, workers must be asked about their level. These measures can be considered as subjective. Moreover as discussed about working hours, some objective measures do not necessarily show linear relationship with our dependent variables. According to individuals, working full time can be considered as a too long working week and they expect working only part time (in our sample, 33% between 10-29 hours a week and 1,5% less than 10 hours, both in higher proportion in France). This statement can be demonstrated by the low correlations between actual income and agreement with "My income is high" (0.34) or between actual working hours and willingness to work less (-0.06).

To conduct this analysis, we have first performed a correlation study, using our previous controls and subjective measures of job outcomes to assess their potential relative contribution to explained variance in organizational commitment, especially between countries. Variables ended by Os or OsR are our subjective (s) measures of current occupation (O), that might be reversed (R), in opposition to Oo and OoR, the objective (o) measures of current occupation (O). Results are presented for OCommit in table 12. Similar patterns are found for OCommitM.

All countries		France		The United States		Canada	
Signif. correlations*	OCommit	Signif. correlations*	OCommit	Signif. correlations*	OCommit	Signif. correlations*	OCommit
OCommit	1,00	OCommit	1,00	OCommit	1,00	OCommit	1,00
OCommitM	0,99	OCommitM	0,99	OCommitM	0,99	OCommitM	0,99
OCommitProudR	0,87	OCommitProudR	0,87	OCommitProudR	0,89	OCommitProudR	0,88
OCommitHelpR	0,76	OCommitHelpR	0,71	OCommitStayR	0,76	OCommitStayR	0,72
OCommitStayR	0,73	OCommitStayR	0,69	OCommitHelpR	0,74	OCommitHelpR	0,69
RelMgmtR	0,46	RelMgmtR	0,41	RelMgmtR	0,48	InterestOsR	0,48
InterestOsR	0,43	InterestOsR	0,40	InterestOsR	0,47	RelMgmtR	0,43
AdvanceOsR	0,35	AdvanceOsR	0,33	RelColleagueR	0,33	AdvanceOsR	0,29
IndpdtOsR	0,30	IndpdtOsR	0,31	SecureOsR	0,32	RelColleagueR	0,28
LIncomeOo	0,30	IncomeOsR	0,26	UsefulOsR	0,32	HelpOsR	0,28
LFincomeOo	0,29	RelColleagueR	0,22	HelpOsR	0,29	IndpdtOsR	0,27
RelColleagueR	0,28	UsefulOsR	0,20	AdvanceOsR	0,26	UsefulOsR	0,25
HelpOsR	0,28	SkillUse	0,20	IndpdtOsR	0,24	IncomeOsR	0,19
IncomeOsR	0,28	HelpOsR	0,19	IncomeOsR	0,23	SecureOsR	0,18
UsefulOsR	0,26	SuperviseD	0,18	SkillUse	0,16	SuperviseD	0,18
SecureOsR	0,23	LIncomeOo	0,14	LFincomeOo	0,15	LIncomeOo	0,16
SkillUse	0,20	LFincomeOo	0,12	SuperviseD	0,15	AgeM	0,14
RelaxR	0,18	SecureOsR	0,12	WLBOs	0,13	SkillUse	0,11
WLBOoS	0,15	WLBOoS	0,12	LIncomeOo	0,12	FullPartialS	0,07
SuperviseD	0,14	SexD	0,09	AgeM	0,11	LFincomeOo	0,07
WLBOs	0,11	RelaxR	0,08	RelaxR	0,10	WLBOs	0,07
AgeM	0,09	WLBOs	0,07	WLBOoS	0,09	Hhcompo	0,03
Hhcompo	0,05	EducYearsN	0,04	EducYearsN	0,08	WLBOoS	0,03
SexD	0,04	Hhcompo	0,01	Hhcompo	0,08	SexD	0,02
UnionD	0,01	FullPartialOo	-0,01	UnionD	0,00	SectorOo	0,02
SectorOo	0,00	UnionD	-0,03	FullPartialOo	-0,03	EducYearsN	-0,02
EducYearsN	-0,03	AgeM	-0,04	SexD	-0,04	FullPartialOo	-0,03
FullPartialOo	-0,03	SectorOo	-0,04	WLBJob	-0,08	ExhaustR	-0,06
DangerR	-0,03	Marital	-0,04	SectorOo	-0,08	UnionD	-0,07
Occup3	-0,07	DangerR	-0,05	StressR	-0,09	DangerR	-0,07
Marital	-0,08	StressR	-0,07	Marital	-0,09	Occup3	-0,08
PhysicalR	-0,09	PhysicalR	-0,08	DangerR	-0,09	StressR	-0,08
StressR	-0,11	SkillImprove	-0,09	ReligFrq	-0,11	ReligFrq	-0,08
ExhaustR	-0,12	ExhaustR	-0,12	ExhaustR	-0,11	PhysicalR	-0,10
WLBJob	-0,12	Occup3	-0,12	Occup3	-0,12	Marital	-0,15
FlexOsR	-0,17	ReligFrq	-0,14	FlexOsR	-0,14	WLBJob	-0,18
IndpdtOrgaOs	-0,19	WLBJob	-0,17	IndpdtOrgaOs	-0,15	SkillImprove	-0,19
SkillImprove	-0,19	FlexDayoffOs	-0,20	PhysicalR	-0,15	FlexOsR	-0,20
FlexDayoffOs	-0,22	FlexOsR	-0,21	SkillImprove	-0,17	SkillTransfer	-0,26
ReligFrq	-0,24	IndpdtOrgaOs	-0,22	FlexDayoffOs	-0,21	IndpdtOrgaOs	-0,27
SkillTransfer	-0,27	SkillTransfer	-0,23	SkillTransfer	-0,26	FlexDayoffOs	-0,27

\* Correlation coefficients in bold are significant at a level of .05

Table 11 – Correlation analysis using OCommit variable

The Pearson correlation analysis have highlighted higher level of correlations for organizational commitment with subjective than objective measures of current occupation. In the decreasing order above 0.25, we observe agreement level with “Relations at the workplace between management and employees are good to quite good” (RelMgmtR – 0.46), “My job is interesting” (InterestOsR – 0.43), “My opportunities for advancement are high” (AdvanceOsR – 0.35), “I can work independently” (IndpdtOsR – 0.30), “Relations at the workplace between colleagues/workmates are good to quite good” (RelColleagueR – 0.28) “In my job I can help other people” (HelpOsR – 0.28), “My income is high” (IncomeOsR – 0.28), “My present work experience and/or job skills will be not useful to look for a new job” (SkillTransfer - -0.27). Log of respondent’s and family’s income show a correlation coefficient of 0.30 and 0.29 respectively, while working hours (WLBOoS) is related to OCommit at a level of 0.15 only. However we indeed expect a higher relative contribution of subjective than objective measures of job outcomes. An interesting finding is also that labour conditions (danger, stress, physical demand and exhaust feeling) are only between -0.12 and -0.09 and socio-

demographic controls lower than 0.15, except for log of respondent's and family's income. Patterns are confirmed at the country level, with levels of correlations lower than 0.16 for respondent's and family's income for all countries. When considering all the correlations greater than 0.25, we observe only 5 variables for France, opposed to 7 for the US and 10 for Canada. This statement will be confirmed with lower adjusted R-squared when considering country-specific regressions and through a more parsimonious regression model.

To test the higher contribution of subjective measures of job outcomes to explained variance of organizational commitment, we have introduced them into our previous regression analysis. Results are detailed in Appendix 4. Conducting the same analysis on adjusted R-squared, the results are presented in the next table.

<b>Adjusted R-squared Ocommit regressions</b>	<b>France</b>	<b>The United States</b>	<b>Canada</b>
Socio-demographic controls only	2,60%	1,29%	8,56%
Job related controls only	5,83%	4,86%	9,42%
Socio-demo + job related controls	9,34%	6,20%	1,29%
subjective measures of job outcomes only	31,97%	41,09%	38,07%
Socio-demo + job related controls + subjective measures of job outcomes	38,10%	43,30%	53,30%

*Table 12 – Comparison of adjusted R-squared of country-specific regressions*

Figures confirm our hypothesis that subjective measures of job outcomes account for a much greater amount of explained variance of our dependent variable, OCommit. Moreover, as expected, proportion of explained variance of French organizational commitment becomes the lowest with 32%, compared to 43% for Americans and 53% for Canadians for subjective-measure regressions.

To better assess the relative importance of each explanatory variables identified previously in each country, we have used both step-wise and backward regression methods. In both cases, variables showing a p-value for t test lower than the significance level of 0.05 have been removed. F-tests have also been performed to assess the jointly non significance of removed variables. The final OLS regression models for OCommit are detailed in Appendix 4.

Good relationships with management, interesting job, high opportunities for advancement are common explanatory variables for organizational commitment between countries. However each of them shows some specificities. With the most parsimonious model, French workers are more committed to their organization when they have a job useful to society and surprisingly, when their starting and finishing times are defined by their employers. Usefulness to society is also shared by Americans. Their commitment also depends on their perception of having a high income and the easiness to take some hours off. Canadians also appreciate the possibility to be absent for few hours for personal or family reasons.

Regarding controls, French regular attendees of religious service are found to be more committed, especially Catholics (52% of the French sample), while Americans supervisors show more reciprocity towards their organization. In Canada, commitment becomes higher for men and mono-parental families, with respect to single households. Canadian educated workers are less implicated, which is confirmed by higher estimated coefficient for supervisors and lower one for low occupational class.

All these explanatory variables are found significant when integrating country-dummy variables in the model. Explained variance of organizational commitment reaches almost 50% for Canada and the model with country-dummy variables. However scores remain the lowest for France with 32,4%. We propose to investigate the congruence effect between preferences and subjective measures of job outcomes in the next section, trying to explain more the particularities of French workers.

#### **d. The impact of congruence on organizational commitment**

We have defined congruence as the matching between preferences related to job outcomes and their subjective assessment. Three types of variables have been created for each topic:

- Congruence as a dummy variable (CyD), which is equal to 1 when subjective measures are congruent with preferences
- Congruence as a categorical variable (CyC) with 1 for non congruence, 2 for neutral position and 3 for congruence

- Congruence as a difference (CyDiff) between scores for preferences and subjective measures.

The related topics are summarized in the next table.

N°	Topic	Preferences				Current occupation			
		Variable nam	Variable label	Questions	Response scale	Variable name	Variable label	Questions	Response scale
1	Income	IncomePR	Preference: high income	How important is high income?	From 1 "Not important at all" to 5 "Very important"	IncomeOsR	Occupation_subj: high income	My income is high	From 1 "Strongly disagree" to 5 "Strongly agree"
2	Advancement	AdvancePR	Preference: opportunities for advancement	How important is good opportunities for advancement?	From 1 "Not important at all" to 5 "Very important"	AdvanceOsR	Occupation_subj: opportunities for advancement	My opportunities for advancement are high	From 1 "Strongly disagree" to 5 "Strongly agree"
3	Interest	InterestPR	Preference: interesting job	How important is an interesting job?	From 1 "Not important at all" to 5 "Very important"	InterestOsR	Occupation_subj: interesting job	My job is interesting	From 1 "Strongly disagree" to 5 "Strongly agree"
4	Independency	IndpdtPR	Preference: work independently	How important is a job that allows someone to work independently?	From 1 "Not important at all" to 5 "Very important"	IndpdtOsR	Occupation_subj: work independently	I can work independently	From 1 "Strongly disagree" to 5 "Strongly agree"
5	Usefulness	UsefulPR	Preference: job useful to society	How important is a job that is useful to society?	From 1 "Not important at all" to 5 "Very important"	UsefulOsR	Occupation_subj: job useful to society	My job is useful to society	From 1 "Strongly disagree" to 5 "Strongly agree"
6	Flexibility	FlexPR	Preference: time flexibility	How important is a job that allows someone to decide their times or days of work?	From 1 "Not important at all" to 5 "Very important"	FlexOsR	Occupation_subj: time flexibility	Which of the following statements best describes how your working hours are decided? (By working hours we mean here the times you start and finish work, and not the total hours you work per week or month)	Starting and finishing times are decided by my employer and I cannot change them on my own/ I can decide the time I start and finish work within certain limits/ I am entirely free to decide when I start and finish work
7	Flexibility	FlexPR	Preference: time flexibility	How important is a job that allows someone to decide their times or days of work?	From 1 "Not important at all" to 5 "Very important"	FlexDayoffOsR	Occupation_subj: easiness to take some hours off	How difficult would it be for you to take an hour or two off during working hours to take care of personal or family matters?	1 Not difficult at all 2 Not too difficult 3 Somewhat difficult 4 Very difficult

Table 13 – Synthesis of congruence topics

We propose to consider variable related to high income to explain the way congruence variables have been computed. Let's consider the most complicated case which is the categorical variable.

- We have congruence on job security items if :
  - IncomePR is rated 1 "Not important at all", whatever the answer is for IncomeOsR
  - IncomePR is rated 2 "Not important" and IncomeOsR's answer varies from 2 "Disagree" to 5 "Strongly agree"
  - IncomePR is rated 4 "Important" and IncomeOsR's answer relies between 4 "Agree" to 5 "Strongly agree"
  - IncomePR is rated 5 "Very important" and IncomeOsR's answer is only 5 "Strongly agree"
- We have neutrality when IncomePR is rated 3 "Neither important, nor important", whatever the answer is for IncomeOsR

- We do not have congruence when :
  - IncomePR is rated 2 “Not important” and IncomeOsR’s answer is “Strongly disagree”
  - IncomePR is rated 4 “Important” and IncomeOsR’s answer relies between 1 “Strongly disagree” and 3 “Neither agree nor disagree”
  - IncomePR is rated 5 “Very important” and IncomeOsR’s answer relies between 1 “Strongly disagree” and 4 “Agree”

Performing a correlation analysis, we have found that the congruence difference variables were the most correlated with our subjective measures of job outcomes. Using the mean of our seven congruence difference variables, controlling for missing values, we have tested congruence effect in our last country-specific regressions. A congruence effect is found in France only, after controlling for our previous variables. The higher the congruence between preferences and related subjective assessments, the more French workers are committed to their organization. Mean congruence index explains 14% of the variance of organizational commitment in France, when it is the single variable introduced in a regression on OCommit. However the pseudo R-squared remains below the other countries, with 32,5% of explained variance.

Can lower scores on organizational commitment be explained by incongruence effect ? To answer this question, we have run the regression specific to France on OCommit, introducing interacted variables between subjective measures and its related dummy or categorical congruence variable. The results are summarized in the next table:



Congruency results	Ocommit - France				Ocommit - France			
	General results	With dummy variables			General results	With Categorical variables		
		Occupation	Congruency	Coefficient		Occupation	Congruency	Coefficient
RelMgmt	0.229*** (0.0260)		Yes	-0.251** (0.126)	0.224*** (0.0264)		Neutral	-0.320** (0.150)
AdvanceOsR	0.156*** (0.0391)	3- Neutral	(57 observations)		0.166*** (0.0455)	3- Neutral	(46 observations)	-0.472** (0.233)
			No	-0.339** (0.171)			(15 observations)	-0.346* (0.185)
InterestOsR	0.223*** (0.0341)	1- Strongly disagree	Yes	1.020** (0.499)	0.224*** (0.0359)	1- Strongly disagree	Neutral	1.088*** (0.412)
			(3 observations)	0.991*** (0.342)			(3 observations)	0.948*** (0.357)
UsefulOsR	0.0667* (0.0380)	2- Disagree	Yes	0.215* (0.112)	0.0752* (0.0384)	2- Disagree	Neutral	0.201* (0.113)
			(3 observations)	0.239** (0.0927)			(3 observations)	0.225** (0.0931)
FlexOsR	-0.0874 (0.0644)	3- Neutral	No	0.129** (0.0648)	-0.0871 (0.0736)	3- Neutral	No	0.174** (0.0726)
			(89 observations)	-0.183*** (0.0700)			(89 observations)	0.488*** (0.157)

Robust standard errors in parentheses\*\*\* p<0.01, \*\* p<0.05, \* p<0.1Weighted Data

Table 14 – Results from regression on OCommit with dummy and categorical congruence variables

One can interpret the second part with categorical variables as detailed explanation of the first part with dummy variables. Neutral position is indeed included in the congruence coding for dummy variables, while we made the difference between the three categories in categorical variables. Only the last variable, FlexOsR, shows different results between dummy and categorical-based regressions.

We may expect positive coefficient when congruence or neutral positions and negative ones when incongruence. Considering only results with more observations than the degree of freedom (30 for dummy variables and 43 for categorical variables), when we observe congruence between preferences and subjective measures of the related outcomes, you find indeed a positive coefficient with the highest effect size for FlexOsR. When the worker finds opportunities for advancement neither important nor not important and the actual opportunities are partly available within the organization, it seems to have a negative impact on organizational commitment, as if the neutral position moves to the incongruence one (AdvanceOsR). At last in case of incongruence, we have consistent results with negative coefficient (AdvanceOsR, FlexOsR) with the second highest effect size for AdvanceOsR but also inconsistent results with positive coefficients (UsefulOsR). One can relate this last finding to the higher-order variable. It seems that some outcomes matters, whatever the congruence with the preferences of the individuals, as for UsefulOsR.

The inconsistency of actual outcomes measured subjectively with preferences at work do not explain the paradoxal position of French workers in the distribution of organizational commitment with a specific emphasis put on desires and needs at work.

## V. DISCUSSION

In this research, we have investigated the paradoxal position of France on the construct of commitment at work. However only organizational commitment shows this specific pattern, whereas employment commitment doesn't rank French workers in the tails of the distribution. Using a comparison with the United States, the top-ranked country on our index OCommit and Canada in median position, we have observed that socio-demographic variables and job-related objective characteristics have not account for much explained variance of the dependent variables. Organizational commitment is mainly determined by subjective measures of job outcomes, especially quality of the relationship with management, interest of the job and opportunities for advancement. Each country has shown specific explanatory variables: the need for having one's starting and finishing time work defined by one's employer in France, the requirement for independence and time flexibility, as well as good relationships with one's workmates in the US and the possibility to take some hours off for personal reasons in Canada. A last finding was the existence of a congruence effect for France, even if incongruence may not account for lower scores in reciprocity towards firms. All in all, even after introducing congruence effect, explained variance for French organizational commitment remains lower than for other countries.

The first result on the French position in the distribution of employment commitment is consistent with some researchers' point of view, considering that employment commitment may increase, with respect to organizational commitment, as in an economic climate of higher job insecurity, commitment to one's employers may appear risky, from the worker's point of view (Turunen, 2011). It also supports the assumption that work life of an individual can be considered as a unit in its entirety (Stagner, 1954). One may wonder to what target workers do really commit ultimately: their organization, their employment, their occupation, their career, their work group, their managers ? Employees probably do commit to all of them, but at a different level. At last it is congruent with the study conducted by Méda & Vendramin (2013) on French workers: 67% of French people consider work as the most important value after family, which is disconnected from the organizational consideration. They also shows an interesting result: job interest (59.5%) is more important than social relationship at work (58.6%) for French workers, which is the opposite pattern of

other European countries. French workers' involvement is explained by the valorization of intrinsic dimensions, with respect to extrinsic dimensions of labor (income, security). These two statistics can explain the more central position of France in the distribution of employment commitment.

Regarding our results on congruence for France, if they do explain some additional part of variance of reciprocity towards firms, it also support the theoretical assumption of the fit theories summarized by Arthur, Bell, Villado, and Doverspike (2006) : "Theoretically, the relation between fit and attitudes is predicated on the reasoning that where there is a fit, the environment affords individuals the opportunity to fulfill their needs....Need fulfillment results in favorable attitudes, such as job satisfaction and job commitment". Indeed the worker is not willing to leave the organization that fulfills its needs as their ability to satisfy their needs may decrease otherwise. It is consistent with the concept of job embeddedness, which is the combined forces that keep a person from leaving his job, including both on- and off-the-job forces (Mitchell & al, 2001). Satisfying one's needs in one's organization acts as a force that embeds employees in the organization and so increases organizational commitment.

However we were not able to explain the paradoxal position of France using incongruence effect. Some explanations can be given to this result. As workers may have multiple targets of commitment, they may encounter conflicts in implication and make trade-offs. Meyer & al (2001) give the example of "being committed to attend a meeting can conflict with commitment to care for a sick child" (p. 318). It implies that the relation between organizational commitment and the individual's final behavior may be moderated by the level of other forms of commitment. It has been highlighted in the first French regressions including only socio-demographic variables, with a significant and negative estimated coefficient for mono-parental families. It may also explain the need for French workers to have their starting and finishing time fixed by their employers, to limit conflict with other sources of involvement. Life goals defined by Headey (2006) can also account for this French pattern. He replaces the distinction between economic and non economic domains by zero sum and non-zero sum domains. Zero-sum competitive domains refer to domains in which one person's relative gain is another person's relative failure and includes commitment to career success, wealth, income,

consumption, social status. They decrease life satisfaction. At the opposite, non zero-sum domains are domains in which one person's gains is independent of what others gain in the same domains and gather commitment to family, friends, social and political involvement. Using panel data, he notices that life goal changes predict life satisfaction. As French paradoxal position is also observed for job satisfaction and organizational commitment is also defined as a construct of well-being, it seems that French workers show a low well-being equilibrium at work, relying on the set point theory. Headey's approach can be used to interpret these low scores as a too high emphasis on zero-sum domains relative to non-zero sum domains, confirmed by the high value of work in France (Méda & Vendramin, 2013)

### *Limitations*

A first critic can be made regarding the fact that we haven't invested the construct of employment commitment, which is not so studied both in psychology and in economics. It could have been interesting to compare the explanatory variables between indexes and between countries. Another point to mention is that our study didn't help us understand the differences between the three initial measures of organizational commitment, in terms of determinants across the countries at stake and relative importance for workers. Working only on indexes, especially OCommit, we have only identified determinants of the higher-order factor and not its related dimensions. The last critic that can be made is the small size of our French sample, which do not enable us to go deeper in the analysis of congruence effect, especially incongruence patterns. If our initial ambition was to include both 1997 and 2005 datasets, this option must have been discarded, due to the missing data or variables for the countries at stake. Another option would have been to choose another top-rank country, for example Dominican Republic.

### *Implication for future researches*

In order to increase explained variance of organizational commitment among French workers, additional explanatory variables can be investigated, especially macro-level indicators, such as unemployment, inflation, wage and price freedom, civil liberty, fiscal burden of government, voting turnout (Clark, 2011). It could be also interesting to add cultural dimensions, through Schwartz's

values (harmony, embeddedness, hierarchy, mastery, affective autonomy, intellectual autonomy, egalitarianism). Meyer & al (2012) have demonstrated that when controlling for economic indicators (gross national per capita, gross domestic product growth, gross domestic product 10-year average growth), Schwartz's values account for the most incremental variance, in particular for normative organizational commitment. At the individual level, personality factors could also be studied, as partly available in the dataset of Work Orientation III : extraversion is significantly related to all the three dimensions of organizational commitment, while agreeableness is correlated to the normative factor and neuroticism, conscientiousness and openness to experience to the continuance one (Erdheim & al, 2006). All these variables may help better understand the specificities of French organizational commitment and account for additional explained variance in our model.

This study relies on a cross-section dataset, which do not allow investigating impacts on actual behaviors in organizations. It could be interesting to use panel data to test how much our index and each of the three initial items predict turnover intention and actual turnover. The use of panel data can also be relevant at a firm level, testing the impact of HR measures. One strategy to help improving commitment at work could be to invest on the quality of the relationships, especially with management and to develop skill transferability, as identified in Canada regression. Developing one's workers' skills and having good working experiences could be a trade-off for firms to favor organizational commitment, in a context in which they cannot assure stable employment.

## VI. CONCLUSION

The current study has considered Person-Organization Fit as an explanatory dimension that enhances or decreases employee's need satisfaction and as a consequence, commitment at work. Comparing France to the United States and Canada enables us to understand the specific drivers of the paradoxal position of French workers in the distribution of organizational commitment, especially the existence of a congruence effect. Even if our hypothesis to explain its lower ranking in cross-country studies by a higher amount of needs misfit was discarded, this research shows the relevance to consider this theoretical framework to potentially identify additional determinants of worker's attitudes in international studies.

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## APPENDIX

### Appendix 1: Generation of the dependent variables

#### Organizational commitment

##### Pearson-correlation analysis using the 6 related variables

Pearson correlations	OCommitHelpR	OCommitStayR	OCommitProudR	OCommitFindJob	OCommitReplace	OCommitJobSeach
OCommitHelpR	1.0000					
OCommitStayR	0.3416*	1.0000				
OCommitProudR	0.5467*	0.4359*	1.0000			
OCommitFindJob	0.0066	0.0760*	0.0354*	1.0000		
OCommitReplace	0.1433*	0.1551*	0.1495*	0.0070	1.0000	
OCommitJobSeach	0.1379*	0.3124*	0.2571*	0.2274*	0.1028*	1.0000

\* significant at a level of .05

##### Factorial analysis using the 6 related variables

Factor analysis/correlation  
 Method: principal factors  
 Rotation: (unrotated)

Number of obs = 20568  
 Retained factors = 2  
 Number of params = 11

Factor	Eigenvalue	Difference	Proportion	Cumulative
Factor1	1.41471	1.13798	1.1810	1.1810
Factor2	0.27673	0.28082	0.2310	1.4121
Factor3	-0.00409	0.07016	-0.0034	1.4087
Factor4	-0.07425	0.11281	-0.0620	1.3467
Factor5	-0.18706	0.04115	-0.1562	1.1905
Factor6	-0.22821	.	-0.1905	1.0000

LR test: independent vs. saturated:  $\chi^2(15) = 1.6e+04$  Prob> $\chi^2 = 0.0000$

Factor loadings (pattern matrix) and unique variances

Variable	Factor1	Factor2	Uniqueness
OCommitHelpR	0.6039	-0.2141	0.5894
OCommitStayR	0.5780	0.0764	0.6601
OCommitPro~R	0.7016	-0.1174	0.4939
OCommitFin~b	0.1248	0.3261	0.8781
OCommitRep~e	0.2294	-0.0038	0.9473
OCommitJob~h	0.3942	0.3239	0.7397

### Factorial analysis using the 3 variables: OCommitHelpR, OCommitStayR, OCommitProudR

```
Factor analysis/correlation                                Number of obs    =    22891
  Method: principal factors                                Retained factors =         1
  Rotation: (unrotated)                                    Number of params =         3
```

Factor	Eigenvalue	Difference	Proportion	Cumulative
Factor1	1.20204	1.28590	1.3447	1.3447
Factor2	-0.08387	0.14039	-0.0938	1.2509
Factor3	-0.22425	.	-0.2509	1.0000

LR test: independent vs. saturated:  $\chi^2(3) = 1.4e+04$  Prob> $\chi^2 = 0.0000$

Factor loadings (pattern matrix) and unique variances

Variable	Factor1	Uniqueness
OCommitHelpR	0.6457	0.5831
OCommitPro~R	0.7085	0.4981
OCommitStayR	0.5321	0.7168

### Prediction of the dependent variable OCommit resulting from factorial analysis

```
. predict OCommit
(regression scoring assumed)
```

Scoring coefficients (method = regression)

Variable	Factor1
OCommitHelpR	0.33268
OCommitPro~R	0.42350
OCommitStayR	0.23339

## Appendix 2: Variables used in the research

Variable Name	Variable Label	Obs	Mean	SD	Min	Max
AdvanceCyC	Opportunities for advancement: categorical congruency= 3 when congruency	3083	1,61	0,81	1,00	3,00
AdvanceCyD	Opportunities for advancement: dummy congruency= 1 when congruency	3083	0,40	0,49	0,00	1,00
AdvanceCyDiff	Opportunities for advancement: congruency by difference: AdvanceOsR - AdvancePR =4 if neutral	3042	2,79	1,33	0,00	8,00
AdvanceOs	Occupation_subj: opportunities for advancement	3063	3,45	1,07	1,00	5,00
AdvanceP	Preference: opportunities for advancement	3108	2,11	0,91	1,00	5,00
Age	Age	3125	41,92	11,26	18,00	84,00
AgeM	Max change: Age	3125	41,92	11,26	18,00	84,00
CommitM	Mean Commitment Index	2779	3,37	0,72	1,00	5,00
CommitS	Sum of the two Mean Commitment Index	2779	6,80	1,44	2,00	10,00
CongruencyM	Mean Congruency Index	2877	3,32	0,60	0,38	5,38
CongruencyMF	France - Mean Congruency Index	892	3,20	0,65	0,38	5,38
Country	Country	3156	16,86	8,90	6,00	28,00
Danger	Working conditions: work in dangerous conditions	3091	4,00	1,15	1,00	5,00
ECommitJob	Enjoy a paid job even if I did not need money	3049	2,48	1,12	1,00	5,00
ECommitM	Mean Job Commitment Index	2999	3,57	0,94	1,00	5,00
ECommitMoney	Job is a way of earning money	3095	3,59	1,20	1,00	5,00
EducDegree	Highest education level	3144	3,62	1,25	0,00	5,00
EducYears	Number of completed years of schooling	3096	14,37	4,50	1,00	96,00
Exhaust	Working conditions: come home from work exhausted	3113	2,64	0,86	1,00	5,00
FincomeFS	Family income: France - earnings per month in euros	957	6,06	1,89	1,00	11,00
FincomeOoCAS	Family income: Canada - earnings in dollars	479	6,73	2,76	1,00	10,00
FincomeOoNOS	Family income: Norway - earnings in nkr	741	7,67	1,48	1,00	14,00
FincomeUSS	Family income: US - earnings per year in dollars	750	17,47	4,66	1,00	25,00
FlexCyC	Time flexibility (start/end work): categorical congruency= 3 when congruency	3086	1,55	0,72	1,00	3,00
FlexCyD	Time flexibility (start/end work): congruency= 1 when congruency	3086	0,42	0,49	0,00	1,00
FlexCyDiff	neutral	3062	2,97	1,27	0,00	6,00
FlexDayoffCyC	Time flexibility (day off): categorical congruency= 3 when congruency	3095	2,19	0,83	1,00	3,00
FlexDayoffCyD	Time flexibility (day off): congruency= 1 when congruency	3095	0,74	0,44	0,00	1,00
FlexDayoffDiff	Time flexibility (day off): congruency by difference: FlexDayoffOsR - FlexPR =3 if neutral	3052	3,13	1,29	0,00	7,00
FlexDayoffOs	Occupation_subj: easiness to take a day off	3093	2,17	1,05	1,00	4,00
FlexOs	Occupation_subj: time flexibility	3110	1,56	0,61	1,00	3,00
FlexP	Preference: time flexibility	3095	2,39	0,99	1,00	5,00
FullPartialOo	Occupation_obj: full vs. partial time	3156	1,17	0,40	1,00	3,00
FullPartialP	Preference: full vs. partial time	3111	1,40	0,58	1,00	4,00
FullPartialS	Spouse's current employment status	2105	2,37	2,57	1,00	10,00
HelpCyC	Help others in my job: categorical congruency= 3 when congruency	3079	2,39	0,79	1,00	3,00
HelpCyD	Help others in my job: dummy congruency= 1 when congruency	3079	0,81	0,39	0,00	1,00
HelpCyDiff	Help others in my job: congruency by difference: HelpOsR - HelpPR =4 if neutral	3047	3,91	0,86	0,00	8,00
HelpOs	Occupation_subj: help other people	3075	2,06	0,98	1,00	5,00
HelpP	Preference: help other people	3098	2,07	0,86	1,00	5,00
Hhcompo	Household composition	3104	5,69	4,66	1,00	95,00
Hhnb	Number of household members	3104	2,79	1,34	1,00	9,00
id	Unique respondent number = Year + Country + Id	0				
IncomeCyC	High income: categorical congruency= 3 when congruency	3114	1,56	0,80	1,00	3,00
IncomeCyD	High income: dummy congruency= 1 when congruency	3114	0,36	0,48	0,00	1,00
IncomeCyDiff	High income: congruency by difference: IncomeOsR - IncomePR =4 if neutral	3083	2,72	1,29	0,00	7,00
IncomeOoCAS	Occupation_obj: Canada - earnings in dollars	489	5,00	2,62	1,00	10,00
IncomeOoFS	Occupation_obj: France - earnings per month in euros	1002	4,27	1,60	1,00	11,00
IncomeOoNOS	Occupation_obj: Norway - earnings in nkr	747	6,02	1,43	1,00	12,00
IncomeOoUSS	Occupation_obj: US - earnings per year in dollars	709	15,12	4,94	1,00	25,00
IncomeOs	Occupation_subj: high income	3099	3,40	1,05	1,00	5,00
IncomeP	Preference: high income	3130	2,04	0,73	1,00	5,00
IndpdtCyC	Work independently: categorical congruency= 3 when congruency	3089	2,31	0,85	1,00	3,00
IndpdtCyD	Work independently: dummy congruency= 1 when congruency	3089	0,75	0,43	0,00	1,00
IndpdtCyDiff	Work independently: congruency by difference: IndpdtOsR - IndpdtPR =4 if neutral	3064	3,80	1,01	0,00	8,00
IndpdtOrgaCyC	Time flexibility (work organization): categorical congruency= 3 when congruency	3095	2,23	0,82	1,00	3,00
IndpdtOrgaCyD	Time flexibility (work organization): dummy congruency= 1 when congruency	3095	0,75	0,43	0,00	1,00
IndpdtOrgaDiff	Time flexibility (work organization): congruency by difference: IndpdtOrgaOsR - FlexPR =3 if neutral	3054	2,41	1,14	0,00	6,00
IndpdtOrgaOs	Occupation_subj: liberty to decide own work's organization	3099	1,97	0,68	1,00	3,00
IndpdtOrgaOsR	Reverse: Occupation_subj: liberty to decide one's work organization	3099	2,03	0,68	1,00	3,00
IndpdtOs	Occupation_subj: work independently	3092	2,14	0,99	1,00	5,00
IndpdtP	Preference: work independently	3110	2,04	0,85	1,00	5,00
InterestCyC	Interesting job: categorical congruency= 3 when congruency	3102	2,04	0,99	1,00	3,00
InterestCyD	Interesting job: dummy congruency= 1 when congruency	3102	0,53	0,50	0,00	1,00
InterestCyDiff	Interesting job: congruency by difference: InterestOsR - InterestPR =4 if neutral	3081	3,38	0,97	0,00	7,00
InterestOs	Occupation_subj: interesting job	3102	2,06	0,92	1,00	5,00
InterestP	Preference: interesting job	3128	1,44	0,58	1,00	5,00
JobSatis	How satisfied are you in your (main) job	3105	2,81	1,18	1,00	7,00
LFincomeOo	Log function of family income	2927	2,09	0,57	0,00	3,22
LIncomeOo	Log function of respondent's income	2947	1,79	0,67	0,00	3,22

Variable Name	Variable Label	Obs	Mean	SD	Min	Max
Marital	Marital status	3110	2,38	1,74	1,00	5,00
Occup2	Rescale : Respondent's current occupation	3102	5,69	81,37	1,00	10,00
Occup3	Rescale by class : Respondent's current occupation	3102	3,35	81,39	1,00	3,00
OCommit	Organizational Commitment Index	2903	-0,09	0,79	-2,34	1,41
OCommitFindJob	Easy or difficult to find a job as good as the current one	3028	3,20	1,14	1,00	5,00
OCommitHelp	Willing to work harder to help firm succeed	3035	2,60	1,16	1,00	5,00
OCommitJobSearch	How likely: try to find a job within next 12 months	2937	2,85	1,06	1,00	4,00
OCommitM	Mean Organizational Commitment Index	2903	3,22	0,85	1,00	5,00
OCommitProud	Proud to be working for my firm	3068	2,22	0,93	1,00	5,00
OCommitReplace	Easy or difficult for firm to replace you	3061	2,67	1,17	1,00	5,00
OCommitStay	I would turn down another job to stay	2957	3,51	1,18	1,00	5,00
PaidJob	Respondent currently working for pay	3156	1,01	0,08	1,00	2,00
Physical	Working conditions: do hard physical work	3108	3,64	1,27	1,00	5,00
RelColleague	Relationships at work between workmates/colleagues	3063	1,85	0,79	1,00	5,00
ReligFrq	Attendance frequency of religious service	2969	4,50	1,68	1,00	6,00
ReligGrp	Religious main group	2953	2,45	1,35	1,00	7,00
RelMgmt	Relationships at work between management and employees	3072	2,33	1,01	1,00	5,00
SectorOo	Occupation_obj: private vs. public sector	3107	2,32	0,92	1,00	3,00
SectorP	Preference: private vs. public sector	2617	1,41	0,49	1,00	2,00
SectorS	Spouse: private vs. public sector	1667	2,38	0,87	1,00	4,00
SecureCyC	Job security: categorical congruency= 3 when congruency	3078	1,86	0,97	1,00	3,00
SecureCyD	Job security: dummy congruency= 1 when congruency	3078	0,45	0,50	0,00	1,00
SecureCyDiff	Job security: congruency by difference: SecureOsR - SecurePR =4 if neutral	3051	3,11	1,31	0,00	8,00
SecureOs	Occupation_subj: job security	3073	2,38	1,18	1,00	5,00
SecureP	Preference: job security	3130	1,50	0,72	1,00	5,00
Sex	Sex	3155	1,53	0,50	1,00	2,00
SexD	Dummy: Sex = 1 for male	3155	0,47	0,50	0,00	1,00
SkillImprove	Skills: training during the past 12 months	3093	1,45	0,50	1,00	2,00
SkillOs	Occupation_subj: gives chance to improve skills	3077	2,16	0,98	1,00	5,00
SkillTransfer	Skills: transferability	3020	1,67	0,78	1,00	4,00
SkillUse	Skills: use of one's skills	3055	2,87	1,00	1,00	4,00
Stress	Working conditions: find work stressful	3112	2,63	0,94	1,00	5,00
Supervise	Supervision of other people at work	3129	1,63	0,48	1,00	2,00
Union	Trade Union membership	3121	2,31	0,90	1,00	3,00
UsefulCyC	Job useful to society: categorical congruency= 3 when congruency	3096	2,35	0,82	1,00	3,00
UsefulCyD	Job useful to society: dummy congruency= 1 when congruency	3096	0,78	0,42	0,00	1,00
UsefulCyDiff	Job useful to society: congruency by difference: UsefulOsR - UsefulPR =4 if neutral	3056	3,87	0,91	0,00	8,00
UsefulOs	Occupation_subj: job useful to society	3080	2,09	0,99	1,00	5,00
UsefulP	Preference: job useful to society	3112	2,03	0,87	1,00	5,00
Weight	Weighting factor	3156	0,97	0,55	0,05	6,10
WLBOo	Occupation_obj: nb of hours worked per week	3104	38,72	10,72	1,00	89,00
WLBPjob	Preference: spending time in a paid job	3069	3,37	0,91	1,00	5,00
Year	Year of the study	3156	2005	0	2005	2005

3 156 observations 113 variables

### Appendix 3: Analysis of the distribution of organizational commitment using socio-demographic and objective job-related controls

VARIABLES	OCommit Socio-demo controls	OCommitM Socio-demo controls	OCommit Job-related controls	OCommitM Job-related controls	OCommit Socio-demo and job-related controls	OCommitM Socio-demo and job-related controls
The United States (omitted : France)	0.802*** (0.0469)	0.904*** (0.0497)	0.595*** (0.0841)	0.682*** (0.0856)	0.588*** (0.0908)	0.686*** (0.0922)
Norway (omitted : France)	0.556*** (0.0417)	0.654*** (0.0443)	0.480*** (0.0480)	0.573*** (0.0505)	0.503*** (0.0499)	0.602*** (0.0524)
Canada (omitted : France)	0.557*** (0.0630)	0.659*** (0.0661)	0.505*** (0.0521)	0.600*** (0.0543)	0.490*** (0.0642)	0.592*** (0.0665)
Male	-0.0256 (0.0327)	-0.0120 (0.0350)			-0.0922** (0.0369)	-0.0785** (0.0392)
18-29 years old (omitted : 45-65 years old)	-0.0126 (0.0504)	-0.0205 (0.0534)			0.0584 (0.0526)	0.0507 (0.0561)
30-44 years old (omitted : 45-65 years old)	0.0456 (0.0396)	0.0360 (0.0421)			0.0695* (0.0413)	0.0590 (0.0437)
Married	0.150*** (0.0462)	0.150*** (0.0483)			0.162*** (0.0468)	0.166*** (0.0487)
Number of completed years of schooling	0.0160*** (0.00475)	0.0167*** (0.00510)			-0.00380 (0.00574)	-0.00459 (0.00619)
At least 2 adults with no children (omitted : single household)	-0.0393 (0.0566)	-0.0489 (0.0606)			-0.0479 (0.0587)	-0.0612 (0.0619)
1 adult with at least one child (omitted : single household)	-0.122 (0.0763)	-0.133 (0.0812)			-0.125 (0.0818)	-0.137 (0.0863)
2 adults with at least one child (omitted : single household)	-0.0721 (0.0686)	-0.0886 (0.0717)			-0.102 (0.0705)	-0.126* (0.0728)
Other household composition (omitted : single household)	-0.0436 (0.0868)	-0.0474 (0.0929)			-0.00180 (0.0866)	-0.00940 (0.0925)
Attends religious service from once a week to several times a year	0.103*** (0.0379)	0.104** (0.0407)			0.113*** (0.0397)	0.112*** (0.0424)
Log function of respondent's income			0.190*** (0.0587)	0.201*** (0.0591)	0.155** (0.0624)	0.159** (0.0632)
Number of hours worked per week			-0.000785 (0.00170)	-0.00117 (0.00184)	0.000358 (0.00179)	-0.000241 (0.00197)
Public sector			0.0396 (0.0372)	0.0318 (0.0389)	-0.00590 (0.0411)	-0.0134 (0.0430)
Supervision responsibilities			0.191*** (0.0363)	0.222*** (0.0384)	0.200*** (0.0377)	0.230*** (0.0402)
Middle occupational class (omitted : high class)			-0.123*** (0.0380)	-0.130*** (0.0403)	-0.145*** (0.0427)	-0.161*** (0.0452)
Low occupational class (omitted : high class)			-0.145*** (0.0525)	-0.161*** (0.0554)	-0.181*** (0.0614)	-0.208*** (0.0650)

Current trade union member			-0.0622 (0.0400)	-0.0677 (0.0424)	-0.0474 (0.0415)	-0.0552 (0.0443)
Constant	-0.782*** (0.0965)	2.369*** (0.103)	-0.719*** (0.0855)	2.431*** (0.0899)	-0.695*** (0.140)	2.500*** (0.148)
Observations	2,585	2,585	2,599	2,599	2,326	2,326
R-squared	0.181	0.193	0.209	0.225	0.227	0.241
Pseudo R-squared	0.177	0.189	0.206	0.222	0.221	0.234

Robust standard errors in parentheses

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Weighted Data



OCommit as DV	France			The United States			Canada		
	Socio-demo controls	Job-related controls	Socio-demo and job-related controls	Socio-demo controls	Job-related controls	Socio-demo and job-related controls	Socio-demo controls	Job-related controls	Socio-demo and job-related controls
Male	-0.0442 (0.0722)		-0.131* (0.0760)	-0.0661 (0.0591)		-0.115* (0.0695)	0.0905 (0.0968)		0.0675 (0.104)
18-29 years old (omitted : 45-65 years old)	0.0816 (0.106)		0.160 (0.109)	-0.0681 (0.0841)		-0.0523 (0.0977)	0.0220 (0.126)		0.0739 (0.130)
30-44 years old (omitted : 45-65 years old)	0.183** (0.0871)		0.234*** (0.0897)	0.0381 (0.0707)		0.0911 (0.0750)	-0.107 (0.106)		-0.170 (0.108)
Married	0.162* (0.0848)		0.179** (0.0812)	0.0606 (0.0816)		0.0793 (0.0888)	0.545*** (0.164)		0.507*** (0.152)
Number of completed years of schooling	0.0217** (0.00897)		0.00167 (0.00973)	0.0196** (0.00826)		-0.00244 (0.0114)	0.0114 (0.0139)		-0.00325 (0.0143)
At least 2 adults with no children (omitted : single household)	0.0380 (0.115)		0.0504 (0.115)	-0.0386 (0.0929)		-0.0547 (0.103)	-0.180 (0.173)		-0.138 (0.157)
1 adult with at least one child (omitted : single household)	-0.295** (0.141)		-0.252* (0.148)	-0.113 (0.114)		-0.146 (0.130)	0.265 (0.211)		0.283 (0.205)
2 adults with at least one child (omitted : single household)	-0.0549 (0.127)		-0.0441 (0.124)	0.0140 (0.109)		-0.0729 (0.117)	-0.305 (0.257)		-0.179 (0.225)
Other household composition (omitted : single household)	-0.0529 (0.168)		-0.0476 (0.168)	0.0932 (0.147)		0.144 (0.149)	-0.427* (0.234)		-0.188 (0.238)
Attends religious service from once a week to several times a year	0.124 (0.0779)		0.173** (0.0737)	0.0884 (0.0612)		0.0877 (0.0657)	0.0383 (0.0959)		0.0352 (0.102)
Log function of respondent's income		0.0838 (0.108)	0.128 (0.124)		0.106 (0.0723)	0.0874 (0.0764)		0.319*** (0.108)	0.178 (0.113)
Number of hours worked per week		0.00335 (0.00421)	0.00331 (0.00465)		0.00273 (0.00280)	0.00406 (0.00279)		-0.00703* (0.00361)	-0.00730* (0.00386)
Public sector		0.119* (0.0622)	0.105 (0.0669)		0.0707 (0.0795)	0.0478 (0.0837)		-0.00770 (0.100)	-0.147 (0.126)
Supervision responsibilities		0.237*** (0.0672)	0.229*** (0.0725)		0.211*** (0.0648)	0.228*** (0.0660)		0.130 (0.0968)	0.120 (0.107)
Middle occupational class (omitted : high class)		-0.186*** (0.0685)	-0.192** (0.0764)		-0.159** (0.0745)	-0.118 (0.0840)		0.0271 (0.0938)	-0.0276 (0.115)
Low occupational class (omitted : high class)		-0.168 (0.109)	-0.214 (0.130)		-0.129 (0.0854)	-0.129 (0.106)		-0.361*** (0.132)	-0.451*** (0.158)
Current trade union member		-0.154* (0.0905)	-0.196** (0.0967)		-0.0404 (0.0948)	-0.0497 (0.0969)		-0.0736 (0.0925)	0.0325 (0.105)
Constant	-0.960*** (0.172)	-0.725*** (0.158)	-0.975*** (0.261)	0.0291 (0.154)	-0.0593 (0.215)	-0.0751 (0.296)	-0.232 (0.240)	-0.133 (0.161)	0.00700 (0.304)
Observations	764	842	713	801	697	672	339	415	306
R-squared	0.039	0.066	0.115	0.025	0.058	0.086	0.113	0.109	0.177

Pseudo R-squared	0.0260	0.0583	0.0934	0.0129	0.0486	0.0620	0.0856	0.0942	0.129
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Robust standard errors in parentheses  
 \*\*\* p<0.01, \*\* p<0.05, \* p<0.1  
 Weighted Data

## Appendix 4: Introduction of subjective measures of job outcomes

OCommit as DV	(1) With country dummies	(2) France	(3) The United States	(4) Canada
The United States (omitted : France)	0.546*** (0.0602)			
Norway (omitted : France)	0.360*** (0.0425)			
Canada (omitted : France)	0.345*** (0.0502)			
Agree with : Good to quite good relations between management and employees	0.199*** (0.0181)	0.228*** (0.0357)	0.206*** (0.0372)	0.181*** (0.0470)
Agree with : Interesting job	0.223*** (0.0227)	0.174*** (0.0335)	0.189*** (0.0401)	0.375*** (0.0545)
Agree with : High opportunities for advancement	0.0641*** (0.0149)	0.127*** (0.0305)	0.0511** (0.0239)	0.0444 (0.0411)
Agree with : Work independently	0.0350** (0.0174)	-0.000880 (0.0279)	0.0632** (0.0286)	0.0351 (0.0486)
Agree with : Good to quite good relations between workmates/colleagues	0.0456** (0.0213)	0.00109 (0.0395)	0.101** (0.0427)	-0.0440 (0.0573)
Agree with : Help other people	0.0126 (0.0197)	0.0252 (0.0313)	0.0156 (0.0426)	0.00526 (0.0512)
Agree with : High income	0.0445*** (0.0167)	0.0147 (0.0369)	0.0519* (0.0285)	-0.0327 (0.0440)
Agree with : Job useful to society	0.0700*** (0.0194)	0.0722** (0.0302)	0.0889** (0.0393)	0.0584 (0.0512)
Agree with : Skills transferability to a new job	-0.00438 (0.0221)	-0.00301 (0.0417)	-0.0478 (0.0426)	0.104** (0.0496)
Agree with : Easiness to take some hours off	0.0535*** (0.0153)	0.0219 (0.0309)	0.0826*** (0.0272)	0.107*** (0.0405)
Agree with : Liberty to decide one's work organization	0.0106 (0.0245)	-0.00122 (0.0544)	0.00118 (0.0398)	0.0301 (0.0681)
Agree with : Liberty to decide starting and ending working time	-0.0104 (0.0267)	-0.0821 (0.0539)	0.0990** (0.0455)	0.0932 (0.0610)
Male	-0.0609** (0.0307)	-0.0353 (0.0691)	-0.133** (0.0562)	0.0958 (0.0916)
18-29 years old (omitted : 45-65 years old)	-0.0425 (0.0452)	0.110 (0.0944)	-0.0593 (0.0786)	-0.0828 (0.110)
30-44 years old (omitted : 45-65 years old)	0.0584* (0.0346)	0.270*** (0.0857)	0.0688 (0.0611)	-0.183** (0.0818)
Married	0.0674* (0.0378)	0.113 (0.0763)	-0.0225 (0.0738)	0.269*** (0.0940)
Number of completed years of schooling	-0.0120**	-0.0158*	-0.00346	-0.0136

	(0.00511)	(0.00924)	(0.0108)	(0.0103)
At least 2 adults with no children (omitted : single household)	0.00752	0.0850	0.0192	0.0639
	(0.0481)	(0.0962)	(0.0807)	(0.102)
1 adult with at least one child (omitted : single household)	-0.0982	-0.297**	-0.0160	0.413***
	(0.0698)	(0.137)	(0.101)	(0.127)
2 adults with at least one child (omitted : single household)	-0.0666	-0.0338	-0.0393	0.0704
	(0.0527)	(0.106)	(0.0921)	(0.125)
Other household composition (omitted : single household)	0.00281	0.0687	0.0995	0.0505
	(0.0722)	(0.154)	(0.123)	(0.170)
Attends religious service from once a week to several times a year	0.0631**	0.142**	0.0545	0.00608
	(0.0315)	(0.0640)	(0.0517)	(0.0717)
Log function of respondent's income	-0.0162	0.110	-0.0642	-0.0214
	(0.0399)	(0.124)	(0.0561)	(0.0777)
Number of hours worked per week	-0.000107	-0.00375	0.00452**	-0.00401
	(0.00137)	(0.00429)	(0.00219)	(0.00324)
Public sector	-0.0260	-0.0287	0.0486	-0.200**
	(0.0339)	(0.0647)	(0.0689)	(0.0776)
Supervision responsibilities	0.0934***	0.0570	0.149***	0.135*
	(0.0297)	(0.0633)	(0.0522)	(0.0798)
Middle occupational class (omitted : high class)	-0.0846**	-0.0799	-0.0660	-0.138
	(0.0339)	(0.0683)	(0.0651)	(0.0968)
Low occupational class (omitted : high class)	-0.0177	-0.00557	0.0525	-0.414***
	(0.0529)	(0.117)	(0.0877)	(0.134)
Current trade union member	-0.0253	-0.108	-0.0513	0.0925
	(0.0357)	(0.0854)	(0.0731)	(0.0934)
Constant	-2.797***	-2.400***	-2.980***	-2.770***
	(0.195)	(0.409)	(0.350)	(0.448)
Observations	2,147	640	666	276
R-squared	0.506	0.409	0.458	0.582
Pseudo R-squared	0.499	0.381	0.433	0.533

Robust standard errors in parentheses

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Weighted Data

OCommit as DV	(1) With country dummies	(2) France	(3) The United States	(4) Canada
The United States (omitted : France)	0.511*** (0.0382)			
Norway (omitted : France)	0.351*** (0.0336)			
Canada (omitted : France)	0.343*** (0.0467)			
Agree with : Good to quite good relations between management and employees	0.224*** (0.0152)	0.221*** (0.0286)	0.264*** (0.0265)	0.204*** (0.0381)
Agree with : Interesting job	0.212*** (0.0208)	0.173*** (0.0306)	0.206*** (0.0354)	0.311*** (0.0383)
Agree with: High opportunities for advancement	0.0590*** (0.0138)	0.136*** (0.0245)	0.0503** (0.0219)	0.0706** (0.0346)
Agree with : Work independently	0.0396** (0.0160)			
Agree with : High income	0.0517*** (0.0147)		0.0518** (0.0239)	
Agree with : Job useful to society	0.0749*** (0.0151)	0.0710*** (0.0240)	0.111*** (0.0306)	
Agree with : Liberty to decide working time		-0.111** (0.0442)		
Agree with : Easiness to take some hours off	0.0564*** (0.0133)		0.0610*** (0.0230)	0.0741** (0.0298)
Male			-0.0995** (0.0458)	
Married				0.201** (0.0877)
Number of completed years of schooling	-0.0114** (0.00457)			
18-29 years old (omitted : 45-65 years old)				-0.191** (0.0922)
30-44 years old (omitted : 45-65 years old)				-0.164** (0.0667)
At least 2 adults with no children (omitted : single household)				-0.0824 (0.0971)
1 adult with at least one child (omitted : single household)				0.242** (0.104)
2 adults with at least one child (omitted : single household)				-0.0507 (0.115)
Other household composition (omitted : single household)				-0.0247 (0.131)
Attends religious service from once a week to several times a year	0.0630**	0.117*		

	(0.0290)	(0.0605)		
Supervision responsibilities	0.0783***		0.133***	0.143**
	(0.0266)		(0.0475)	(0.0594)
Middle occupational class (omitted : high class)	-0.0731**			-0.0307
	(0.0305)			(0.0691)
Low occupational class (omitted : high class)	-0.0158			-0.285***
	(0.0474)			(0.0935)
Constant	-2.706***	-2.189***	-2.419***	-2.317***
	(0.118)	(0.208)	(0.173)	(0.191)
Observations	2,529	792	825	406
R-squared	0.488	0.329	0.411	0.511
Pseudo R-squared	0.485	0.324	0.406	0.494

Robust standard errors in parentheses  
\*\*\* p<0.01, \*\* p<0.05, \* p<0.1  
Weighted Data

## Appendix 5: Topics investigated in congruence hypothesis

N°	Topic	Preferences				Current occupation			
		Variable name	Variable label	Questions	Response scale	Variable name	Variable label	Questions	Response scale
1	Income	IncomePR	Preference: high income	How important is high income?	From 1 "Not important at all" to 5 "Very important"	IncomeOsR	Occupation_subj: high income	My income is high	From 1 "Strongly disagree" to 5 "Strongly agree"
2	Advancement	AdvancePR	Preference: opportunities for advancement	How important is good opportunities for advancement?	From 1 "Not important at all" to 5 "Very important"	AdvanceOsR	Occupation_subj: opportunities for advancement	My opportunities for advancement are high	From 1 "Strongly disagree" to 5 "Strongly agree"
3	Interest	InterestPR	Preference: interesting job	How important is an interesting job?	From 1 "Not important at all" to 5 "Very important"	InterestOsR	Occupation_subj: interesting job	My job is interesting	From 1 "Strongly disagree" to 5 "Strongly agree"
4	Independency	IndpdtPR	Preference: work independently	How important is a job that allows someone to work independently?	From 1 "Not important at all" to 5 "Very important"	IndpdtOsR	Occupation_subj: work independently	I can work independently	From 1 "Strongly disagree" to 5 "Strongly agree"
5	Usefulness	UsefulPR	Preference: job useful to society	How important is a job that is useful to society?	From 1 "Not important at all" to 5 "Very important"	UsefulOsR	Occupation_subj: job useful to society	My job is useful to society	From 1 "Strongly disagree" to 5 "Strongly agree"
6	Flexibility	FlexPR	Preference: time flexibility	How important is a job that allows someone to decide their times or days of work?	From 1 "Not important at all" to 5 "Very important"	FlexOsR	Occupation_subj: time flexibility	Which of the following statements best describes how your working hours are decided? (By working hours we mean here the times you start and finish work, and not the total hours you work per week or month)	Starting and finishing times are decided by my employer and I cannot change them on my own/ I can decide the time I start and finish work within certain limits/ I am entirely free to decide when I start and finish work
7	Flexibility	FlexPR	Preference: time flexibility	How important is a job that allows someone to decide their times or days of work?	From 1 "Not important at all" to 5 "Very important"	FlexDayoffOsR	Occupation_subj: easiness to take some hours off	How difficult would it be for you to take an hour or two off during working hours to take care of personal or family matters?	1 Not difficult at all 2 Not too difficult 3 Somewhat difficult 4 Very difficult

## Appendix 6: Evaluation of the congruence effect between countries

OCommit as DV	(1) With country dummies	(2) With country dummies and Congruence Mean	(3) France	(4) France with Congruence Mean	(5) The United States with Congruence Mean	(6) The United States with Congruence Mean	(7) Canada	(8) Canada with Congruence Mean
Mean Congruence Index		0.00653 (0.0298)		0.125** (0.0591)		-0.0286 (0.0497)		-0.0310 (0.0626)
The United States (omitted : France)	0.511*** (0.0382)	0.514*** (0.0390)						
Norway (omitted : France)	0.351*** (0.0336)	0.344*** (0.0350)						
Canada (omitted : France)	0.343*** (0.0467)	0.344*** (0.0478)						
Agree with : Good to quite good relations between management and employees	0.224*** (0.0152)	0.228*** (0.0156)	0.221*** (0.0286)	0.222*** (0.0298)	0.264*** (0.0265)	0.263*** (0.0266)	0.204*** (0.0381)	0.209*** (0.0393)
Agree with : Interesting job	0.212*** (0.0208)	0.211*** (0.0220)	0.173*** (0.0306)	0.138*** (0.0361)	0.206*** (0.0354)	0.212*** (0.0362)	0.311*** (0.0383)	0.336*** (0.0412)
Agree with : High opportunities for advancement	0.0590*** (0.0138)	0.0548*** (0.0143)	0.136*** (0.0245)	0.109*** (0.0276)	0.0503** (0.0219)	0.0504** (0.0222)	0.0706** (0.0346)	0.0725** (0.0360)
Agree with : Work independently	0.0396** (0.0160)	0.0391** (0.0165)						
Agree with : High income	0.0517*** (0.0147)	0.0503*** (0.0152)			0.0518** (0.0239)	0.0532** (0.0248)		
Agree with : Job useful to society	0.0749*** (0.0151)	0.0752*** (0.0156)	0.0710*** (0.0240)	0.0535** (0.0257)	0.111*** (0.0306)	0.116*** (0.0313)		
Agree with : Liberty to decide one's work organization			-0.111** (0.0442)	-0.127*** (0.0451)				
Agree with : Easiness to take a day off	0.0564*** (0.0133)	0.0527*** (0.0139)			0.0610*** (0.0230)	0.0609** (0.0239)	0.0741** (0.0298)	0.0628** (0.0307)
Male					-0.0995** (0.0458)	-0.101** (0.0456)		
Married							0.201** (0.0877)	0.195** (0.0881)
Number of completed years of schooling							-0.191** (0.0922)	-0.197** (0.0925)
18-29 years old (omitted : 45-65 years old)							-0.164** (0.0667)	-0.164** (0.0681)
30-44 years old (omitted : 45-65 years old)	-0.0114** (0.00457)	-0.0106** (0.00467)						
At least 2 adults with no children (omitted : single household)							-0.0824 (0.0971)	-0.108 (0.0981)



1 adult with at least one child (omitted : single household)							0.242**	0.216**
							(0.104)	(0.106)
2 adults with at least one child (omitted : single household)							-0.0507	-0.0779
							(0.115)	(0.117)
Other household composition (omitted : single household)							-0.0247	-0.0392
							(0.131)	(0.130)
Attends religious service from once a week to several times a year	0.0630**	0.0584**	0.117*	0.0768				
	(0.0290)	(0.0297)	(0.0605)	(0.0617)				
Supervision responsibilities	0.0783***	0.0864***			0.133***	0.146***	0.143**	0.161***
	(0.0266)	(0.0270)			(0.0475)	(0.0472)	(0.0594)	(0.0596)
Middle occupational class (omitted : high class)	-0.0731**	-0.0680**					-0.0307	-0.0116
	(0.0305)	(0.0310)					(0.0691)	(0.0710)
Low occupational class (omitted : high class)	-0.0158	-0.0168					-0.285***	-0.283***
	(0.0474)	(0.0482)					(0.0935)	(0.103)
Constant	-2.706***	-2.726***	-2.189***	-2.280***	-2.419***	-2.370***	-2.317***	-2.288***
	(0.118)	(0.126)	(0.208)	(0.228)	(0.173)	(0.186)	(0.191)	(0.212)
Observations	2,529	2,449	792	745	825	820	406	394
R-squared	0.488	0.488	0.329	0.331	0.411	0.411	0.511	0.515
Pseudo R-squared	0.485	0.484	0.324	0.325	0.406	0.405	0.494	0.495

Robust standard errors in parentheses  
\*\*\* p<0.01, \*\* p<0.05, \* p<0.1  
Weighted Dat